



GERMAN PRODUCER INSTALLS QUALITY CONTROL FOR LARGE BULK PRODUCTS

Ensuring the food safety of raw material can be challenging because of the environments they are produced. The CombiMIDEKI x-ray inspection system enables both inspect larger products or multiple products with an integrated checkweigher system.

A German company addressed a common problem in the fruit and vegetable industry regarding quality control. Ensuring the food safety of raw material can be challenging because the environments they are produced. Harvesting plants from farms or other natural areas can be difficult to control and prevent foreign objects mixing up with the ingredients.

A producer is specialized in packing fruits and vegetables, within their own farmlands, produced a variety of vegetables, fruits and roots. They were interested in accessing larger markets with bigger vendors, however quality control and product quality were a priority since large supermarkets chains and vendors require various certifications and standards.

The financial risks of product recall because is higher and the cost can become significant in expanding business.

Initial conversations were focused on foreign object detection between metal detector and X-ray inspection systems. The company's experience with most foreign objects, that included glass shards and stones, picked up from their farmlands and found in their products. Since metal detectors mainly detect metal, their efficiency to protect from other foreign object contamination did not meet the criteria.

X-ray system detection is based on density rather than magnetic field, therefore is suitable to detect large variety of foreign objects, such as

metal, glass, stones, rubber, plastic and bones with a sophisticated technology. X-ray systems traditionally start from a much higher price range which can be cost-prohibitive for the producer.

Looking for the Solution

In September 2014, during their search for the right solution, the farm got in contact with representative from Mekitec. They were interested by Mekitec's price efficient X-ray solution and demonstration was organized at the food producer's facility. Two different Mekitec X-ray systems were shown, the MEKI designed for smaller products and the MIDMEKI designed to inspect larger products or multiple products.

The demo results were impressive in the factory environment, especially the MIDMEKI since it could inspect even the larger packages. The producer decided to send various products for application test to Mekitec's office in Germany for more accurate results and to source the best setting for products. Application test reports showed 100% accuracy with 0.8mm

metal, 2.0 mm glass and stones detected in product.

Additional features that MEKI X-ray offered was it could inspect and detect missing sauce bags from a ready-made salad, low density salad leaves, and able to detect large snails that are a common hazard in farms. Switching between the various products is also made simple and fast with Mekitec's own software, which was key with a large variety of different products. The downtime between production change could be kept in minimum.

Quality and Quantity control

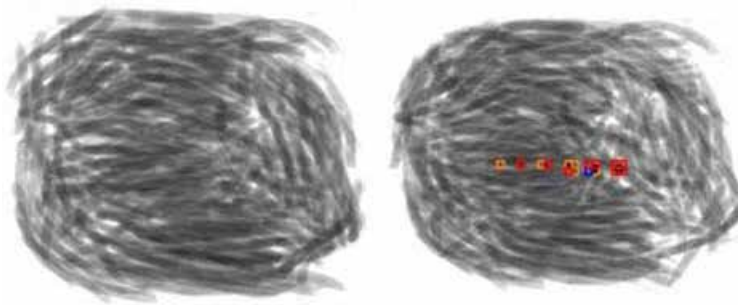
To make the product quality control system more comprehensive, the manufacturer was also interested in the check weighing option. To control the quantity of the product they could be ensure their customers received the correct volume of product. They also wanted to gather information about their own measurement system to ensure a more efficient production to not waste raw material.



CombiMIDMEKI is a complete detection solution to control both quality and quantity.

The food producer was pleased with the results and by the end of September; they decided to order a CombiMIDMEKI unit which is a comprehensive food quality control system with an integrated X-ray unit and checkweigher. This system is controlled by one single screen with Mekitec's own user-friendly software.

The CombiMIDMEKI system arrived at the factory and a Mekitec engineers installed the system and performed set up the system and trained facility personnel. Basic tasks and operations were introduced. With the CombiMIDMEKI, the manufacturer could ensure that products leave the facilities contamination-free.



CombiMIDMEKI is able to detect foreign objects including large product

INFO: MIDMEKI

Detection limits, 6-pack of Ice Cream bars: Stainless steel 0.8mm, Glass 4mm, Stone 4mm.

MIDMEKI combines the benefits of metal detector pricing with the X-ray inspection performance - now for products up to 400mm width and 200mm height.

Suitable food products include aluminum bags, trays, cans & bulk.

Example industries: bakery, dairy, meat & seafood, snack, fruits & vegetables, ready to eat food, frozen, confectionery, cereals & bulk.

About Mekitec



Mekitec has a combined experience of several decades in the development, industrialization and manufacturing of X-ray imaging systems, applied in medical, security and safety areas. This unique combination of in-depth knowledge of various industries has enabled the management to invest in long-term research and development especially for the food industry. The results of this focus and dedication are the state-of-the-art X-ray food safety systems that Mekitec supplies to its customers globally.

The product range is a high-performance, user-friendly and very space and cost competitive

X-ray technology system called MEKI. It is revolutionary as it provides 100% food quality control with high precision X-ray inspection that is designed to replace the simple metal detector with a similar investment. What's more, MEKI with its small and compact footprint, easily fits in every production line, thereby saving useful space in the factory.

With the MEKI range, food producers finally have the choice: To enjoy a fully automated, high precision and small yet cost-effective X-ray food inspection system. The groundbreaking MEKI systems provide food quality control without compromise!